

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED
RESEARCH

Yields of the Field Experiments 1980

[Full Table of Content](#)



80/R/B/9 Spring Barley Controlled Drop Application of Tridemorph

Rothamsted Research

Rothamsted Research (1981) *80/R/B/9 Spring Barley Controlled Drop Application of Tridemorph ; Yields Of The Field Experiments 1980*, pp 272 - 273 - DOI:

<https://doi.org/10.23637/ERADOC-1-31>

80/R/B/9

SPRING BARLEY

CONTROLLED DROP APPLICATION OF TRIDEMORPH

Object: To compare controlled drop application with conventional spraying on the deposition of spray material, control of mildew and on the yield of s. barley - Gt. Harpenden II.

Sponsors: F.T. Phillips, P. Etheridge, A.J. Arnold, B. Pye.

Design: 3 randomised blocks of 11 plots.

Whole plot dimensions: 4.27 x 24.4.

Treatments: All combinations of:-

1. SPRAYER Sprayer and drop density:
 - CDA 1 Controlled drop application sprayer, standard drop density
 - CDA 2 Controlled drop application sprayer, twice standard drop density
 - HYDRAUL Hydraulic sprayer
2. TRI RATE Rates of applying tridemorph (on 12 June, 1980):
 - 1 Standard, 525 g
 - 1/2 Half standard, 263 g
 - 1/4 Quarter standard, 132 g

plus two extra plots

EXTRA

- NONE Unsprayed
- CDA R 1 Controlled drop application sprayer, reduced drop density, applying standard rate tridemorph

NOTES (1) CDA sprayer applied tridemorph in 19 l.

(2) Hydraulic sprayer applied tridemorph in 340 l.

Basal applications: Manures: (20:10:10) at 450 kg, combine drilled.

Weedkillers: Dicamba with mecoprop and MCPA (as 'Banlene Plus' at 5.0 l) in 250 l.

Seed: Wing, sown at 160 kg.

Cultivations, etc.: - Ploughed: 13 Nov, 1979. Spring-tine cultivated:

5 Apr, 1980. Seed sown: 6 Apr. Weedkillers applied: 25 May. Combine harvested: 1 Sept. Previous crops: S. beans 1978, w. wheat 1979.

NOTE: Observations were made on patterns of spray deposition using very small quantities of permethrin as a chemical marker. Mildew was assessed twice during the season.

80/R/B/9

GRAIN TONNES/HECTARE

***** TABLES OF MEANS *****

TRI RATE SPRAYER	1	1/2	1/4	MEAN
CDA 1	4.72	4.36	4.96	4.68
CDA 2	4.95	4.72	4.60	4.76
HYDRAUL	5.65	4.88	4.54	5.02
MEAN	5.11	4.65	4.70	4.82

EXTRA	NONE	CDA R 1	MEAN
	4.34	4.81	4.57

GRAND MEAN 4.77

***** STANDARD ERRORS OF DIFFERENCES OF MEANS *****

TABLE	EXTRA	SPRAYER	TRI RATE	SPRAYER TRI RATE & EXTRA
SED	0.304	0.175	0.175	0.304

***** STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION *****

STRATUM	DF	SE	CV%
BLOCK.WP	20	0.372	7.8

GRAIN MEAN DM% 84.4

PLOT AREA HARVESTED 0.00520